

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

Erratum: Condensation phase diagram of cavity polaritons in GaN-based microcavities: Experiment and theory [Phys. Rev. B 81 , 125305 (2010)] (<i>1 page</i>)	199908(E)
Jacques Levrat, Raphaël Butté, Eric Feltin, Jean-François Carlin, Nicolas Grandjean, Dmitry Solnyshkov, and Guillaume Malpuech	
Publisher's Note: Semiclassical theory for quantum quenches in finite transverse Ising chains [Phys. Rev. B 84 , 165117 (2011)] (<i>1 page</i>)	199909(E)
Heiko Rieger and Ferenc Iglói	
Erratum: Electron paramagnetic resonance study of nanostructured graphite [Phys. Rev. B 84 , 125406 (2011)] (<i>1 page</i>)	199910(E)
Jonas Kausteklis, Pavel Cevc, Denis Arčon, Lucia Nasi, Daniele Pontiroli, Marcello Mazzani, and Mauro Riccò	
Publisher's Note: Magnetoresistance effects and phase coherent transport phenomena in a magnetic nonplanar two-dimensional hole system [Phys. Rev. B 84 , 205302 (2011)] (<i>1 page</i>)	199911(E)
Stefan Knott, Thomas Ch. Hirschmann, Ursula Wurstbauer, Wolfgang Hansen, and Werner Wegscheider	

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

One-dimensional surface states on a striped Ag thin film with stacking fault arrays (<i>9 pages</i>)	195466
Takashi Uchihashi, Puneet Mishra, Katsuyoshi Kobayashi, and Tomonobu Nakayama	
Quantitative determination of energy enhanced interlayer transport in pulsed laser deposition of SrTiO ₃ (<i>12 pages</i>)	195467
Gyula Eres, J. Z. Tischler, C. M. Rouleau, P. Zschack, H. M. Christen, and B. C. Larson	
Single-color pyrometry of individual incandescent multiwalled carbon nanotubes (<i>8 pages</i>)	195468
S. B. Singer, Matthew Mecklenburg, E. R. White, and B. C. Regan	
Thermodynamic stability of PuO ₂ surfaces: Influence of electronic correlations (<i>8 pages</i>)	195469
Gérald Jomard and François Bottin	
Effect of exchange-type zero-bias anomaly on single-electron tunneling of Au nanoparticles (<i>5 pages</i>)	195470
Rui Xu, Yi Sun, Hui Yan, Ji-Yong Yang, Wen-Yu He, Yin Su, Lin He, Jia-Cai Nie, and Yadong Li	

COMMENTS

Comment on “Screening model of metallic nonideal contacts in the integer quantized Hall regime” (<i>1 page</i>)	197301
Tobias Kramer, Viktor Krueckl, Eric J. Heller, and Robert E. Parrott	

ERRATA

Publisher’s Note: Indirect near-field absorption mediated by localized surface plasmons [Phys. Rev. B 84 , 165447 (2011)] (<i>1 page</i>)	199901(E)
Jesper Jung, Mads L. Trolle, Kjeld Pedersen, and Thomas G. Pedersen	
Publisher’s Note: Modeling of the transient mobility in disordered organic semiconductors with a Gaussian density of states [Phys. Rev. B 84 , 165210 (2011)] (<i>1 page</i>)	199902(E)
W. Chr. Germs, J. J. M. van der Holst, S. L. M. van Mensfoort, P. A. Bobbert, and R. Coehoorn	
Erratum: Lattice density-functional theory on graphene [Phys. Rev. B 82 , 235111 (2010)] (<i>1 page</i>)	199903(E)
M. Ijäs and A. Harju	
Erratum: Broadband-infrared assessment of phonon resonance in scattering-type near-field microscopy [Phys. Rev. B 83 , 045404 (2011)] (<i>1 page</i>)	199904(E)
S. Amarie and F. Keilmann	
Erratum: Quantum phase transitions in a strongly entangled spin-orbital chain: A field-theoretical approach [Phys. Rev. B 83 , 205132 (2011)] (<i>1 page</i>)	199905(E)
Alexander Nersesyan, Gia-Wei Chern, and Natalia B. Perkins	
Erratum: First-principles LDA+U and GGA+U study of cerium oxides: Dependence on the effective U parameter [Phys. Rev. B 75 , 035115 (2007)] (<i>1 page</i>)	199906(E)
Christoph Loschen, Javier Carrasco, Konstantin M. Neyman, and Francesc Illas	
Erratum: Modeling of the cubic and antiferrodistortive phases of SrTiO ₃ with screened hybrid density functional theory [Phys. Rev. B 84 , 115122 (2011)] (<i>1 page</i>)	199907(E)
Fedwa El-Mellouhi, Edward N. Brothers, Melissa J. Lucero, and Gustavo E. Scuseria	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

Andreev tunneling enhanced by Coulomb oscillations in superconductor-semiconductor hybrid Ge/Si nanowire devices (<i>6 pages</i>)	195448
Xiao-Jie Hao, Hai-Ou Li, Tao Tu, Cheng Zhou, Gang Cao, Guang-Can Guo, Guo-Ping Guo, Wayne Y. Fung, Zhongqing Ji, and Wei Lu	
Hybrid cavity polaritons in a ZnO-perovskite microcavity (<i>5 pages</i>)	195449
G. Lanty, S. Zhang, J. S. Lauret, E. Deleporte, P. Audebert, S. Bouchoule, X. Lafosse, J. Zuñiga-Pérez, F. Semond, D. Lagarde, F. Médard, and J. Leymarie	
Confinement-induced metal-to-insulator transition in strained $\text{LaNiO}_3/\text{LaAlO}_3$ superlattices (<i>7 pages</i>)	195450
Ariadna Blanca-Romero and Rossitza Pentcheva	
Zak phase and the existence of edge states in graphene (<i>13 pages</i>)	195452
P. Delplace, D. Ullmo, and G. Montambaux	
Electron transport properties of bilayer graphene (<i>5 pages</i>)	195453
X. Li, K. M. Borysenko, M. Buongiorno Nardelli, and K. W. Kim	
Rabi-vibronic resonance with large number of vibrational quanta (<i>8 pages</i>)	195454
R. Glenn and M. E. Raikh	
Si diffusion path for pit-free graphene growth on SiC(0001) (<i>6 pages</i>)	195455
G. F. Sun, Y. Liu, S. H. Rhim, J. F. Jia, Q. K. Xue, M. Weinert, and L. Li	
Curvature-induced spin-orbit coupling and spin relaxation in a chemically clean single-layer graphene (<i>8 pages</i>)	195457
Jae-Seung Jeong, Jeongkyu Shin, and Hyun-Woo Lee	
Prediction of reconstruction in heteroepitaxial systems using the Frenkel-Kontorova model (<i>9 pages</i>)	195458
S. Mehendale, Madhura Marathe, Y. Girard, V. Repain, C. Chacon, J. Lagoute, S. Rousset, and Shobhana Narasimhan	
Giant radiation heat transfer through micron gaps (<i>8 pages</i>)	195459
Igor S. Nefedov and Constantin R. Simovski	
Berry-curvature-mediated valley-Hall and charge-Hall effects in graphene via strain engineering (<i>9 pages</i>)	195460
Zhen-Gang Zhu and Jamal Berakdar	
Nonadiabatic electromigration along a one-dimensional gold chain (<i>5 pages</i>)	195461
Masaaki Araidai and Masaru Tsukada	
Electric-field-direction dependent spatial distribution of electron emission along electrically biased carbon nanotubes (<i>6 pages</i>)	195462
X. L. Wei, D. Golberg, Q. Chen, Y. Bando, and L.-M. Peng	
Graphene quantum dots for valley-based quantum computing: A feasibility study (<i>13 pages</i>)	195463
G. Y. Wu, N.-Y. Lue, and L. Chang	
Scanning tunneling co-ramp spectroscopy for reactive adsorbates (<i>9 pages</i>)	195464
Eunyeoung Choi and In-Whan Lyo	
Surface plasmon driven scalable low-loss negative-index metamaterial in the visible spectrum (<i>6 pages</i>)	195465
Muhammad I. Aslam and Durdu Ö. Güney	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

	Bonding and pressure-tunable interfacial thermal conductance (6 pages)	195432
	Meng Shen, William J. Evans, David Cahill, and Pawel Keblinski	
☞	Macroscopic quantum tunneling in nanoelectromechanical systems (7 pages)	195433
	Mika A. Sillanpää, Raphaël Khan, Tero T. Heikkilä, and Pertti J. Hakonen	
	Dirac boundary condition at the reconstructed zigzag edge of graphene (10 pages)	195434
	J. A. M. van Ostaay, A. R. Akhmerov, C. W. J. Beenakker, and M. Wimmer	
	Superatom orbitals of C ₆₀ on Ag(111): Two-photon photoemission and scanning tunneling spectroscopy (9 pages)	195435
	G. J. Dutton, D. B. Dougherty, W. Jin, J. E. Reutt-Robey, and S. W. Robey	
	Majorana zero modes in one-dimensional quantum wires without long-ranged superconducting order (14 pages)	195436
	Lukasz Fidkowski, Roman M. Lutchyn, Chetan Nayak, and Matthew P. A. Fisher	
	Angle dependence of the Landau level spectrum in twisted bilayer graphene (7 pages)	195437
	Min-Young Choi, Young-Hwan Hyun, and Yoonbai Kim	
	<i>Ab initio</i> calculations of edge-functionalized armchair graphene nanoribbons: Structural, electronic, and vibrational effects (7 pages)	195438
	Nils Rosenkranz, Christian Till, Christian Thomsen, and Janina Maultzsch	
☞	Spectroscopic dielectric tensor of monoclinic crystals: CdWO ₄ (13 pages)	195439
	G. E. Jellison Jr., M. A. McGuire, L. A. Boatner, J. D. Budai, E. D. Specht, and D. J. Singh	
	Structure and growth of tetracene on Ag(111) (16 pages)	195440
	S. Soubatch, I. Kröger, C. Kumpf, and F. S. Tautz	
	Stress and structure at the NiO/Ag(001) interface (6 pages)	195441
	A. Dhaka, D. Sander, H. L. Meyerheim, K. Mohseni, E. Soyka, J. Kirschner, W. A. Adeagbo, G. Fischer, A. Ernst, and W. Hergert	
☞	Majorana fermions emerging from magnetic nanoparticles on a superconductor without spin-orbit coupling (6 pages)	195442
	T.-P. Choy, J. M. Edge, A. R. Akhmerov, and C. W. J. Beenakker	
	Electronic structure of graphene on single-crystal copper substrates (7 pages)	195443
	Andrew L. Walter, Shu Nie, Aaron Bostwick, Keun Su Kim, Luca Moreschini, Young Jun Chang, Davide Innocenti, Karsten Horn, Kevin F. McCarty, and Eli Rotenberg	
	Engineering quantum anomalous/valley Hall states in graphene via metal-atom adsorption: An <i>ab-initio</i> study (9 pages)	195444
	Jun Ding, Zhenhua Qiao, Wanxiang Feng, Yugui Yao, and Qian Niu	
	Inelastic neutron scattering spectra of a hydrogen molecule in a nanocavity: Methodology for quantum calculations incorporating the coupled five-dimensional translation-rotation eigenstates (10 pages)	195445
	Minzhong Xu and Zlatko Bačić	
	Fields radiated by a nanoemitter in a graphene sheet (7 pages)	195446
	A. Yu. Nikitin, F. Guinea, F. J. Garcia-Vidal, and L. Martin-Moreno	
	Half-metallic chromium-chain-embedded wire in graphene and carbon nanotubes (5 pages)	195447
	Yurong Yang, Yang Xiao, Wei Ren, X. H. Yan, and Fengming Pan	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

Adhesion and electronic structure of graphene on hexagonal boron nitride substrates (7 pages)	195414
B. Sachs, T. O. Wehling, M. I. Katsnelson, and A. I. Lichtenstein	
Detection of ultrafast oscillations in superconducting point contacts by means of supercurrent measurements (8 pages)	195415
R. Avriller, F. S. Bergeret, and F. Pistolesi	
Second-layer nucleation in coherent Stranski-Krastanov growth of quantum dots (6 pages)	195417
José Emilio Prieto and Ivan Markov	
Optical conductivity of disordered graphene beyond the Dirac cone approximation (11 pages)	195418
Shengjun Yuan, Rafael Roldán, Hans De Raedt, and Mikhail I. Katsnelson	
Transport in curved nanoribbons in a magnetic field (18 pages)	195419
B. Novakovic, R. Akis, and I. Knezevic	
Molecular dynamics study of the thermopower of Ag, Au, and Pt nanocontacts (13 pages)	195420
F. Pauly, J. K. Viljas, M. Bürkle, M. Dreher, P. Nielaba, and J. C. Cuevas	
Charge redistribution and interlayer coupling in twisted bilayer graphene under electric fields (5 pages)	195421
E. Suárez Morell, P. Vargas, L. Chico, and L. Brey	
Lattice generalization of the Dirac equation to general spin and the role of the flat band (12 pages)	195422
Balázs Dóra, Janik Kailasvuori, and R. Moessner	
$\frac{d\mu}{dn}$ in suspended bilayer graphene: The interplay of disorder and band gap (7 pages)	195423
D. S. L. Abergel, H. Min, E. H. Hwang, and S. Das Sarma	
Fano-type interference in quantum dots coupled between metallic and superconducting leads (9 pages)	195424
Jan Barański and T. Domański	
Low-velocity anisotropic Dirac fermions on the side surface of topological insulators (5 pages)	195425
Chang-Youn Moon, Jinhee Han, Hyungjun Lee, and Hyoung Joon Choi	
Strong-field photoemission from surfaces: Theoretical approaches (14 pages)	195426
Sergey V. Yalunin, Max Gulde, and Claus Ropers	
Localization and circulating currents in curved graphene devices (6 pages)	195427
G. M. M. Wakker, Rakesh P. Tiwari, and M. Blaauboer	
Semiclassical magnetotransport in graphene n - p junctions (19 pages)	195428
Pierre Carmier, Caio Lewenkopf, and Denis Ullmo	
Physical origin of in-plane lattice spacing oscillations measured by reflection high-energy electron diffraction during epitaxial growth (5 pages)	195429
J. D. Fuhr and P. Müller	
Low-energy effective Hamiltonian involving spin-orbit coupling in silicene and two-dimensional germanium and tin (11 pages)	195430
Cheng-Cheng Liu, Hua Jiang, and Yugui Yao	
Magnetization profile for impurities in graphene nanoribbons (8 pages)	195431
S. R. Power, V. M. de Menezes, S. B. Fagan, and M. S. Ferreira	

(Continued)

Raman scattering from biased molecular conduction junctions: The electronic background and its temperature (10 pages)	195325
Michael Galperin and Abraham Nitzan	
Optical coherent current control at surfaces: Theory of injection current (10 pages)	195326
J. L. Cabellos, Bernardo S. Mendoza, and A. I. Shkrebtii	
Generation and dynamics of phononic cat states after optical excitation of a quantum dot (10 pages)	195327
D. E. Reiter, D. Wigger, V. M. Axt, and T. Kuhn	
Surface physics, nanoscale physics, low-dimensional systems	
Free induction decay of a superposition stored in a quantum dot (4 pages)	195401
A. J. Bennett, M. A. Pooley, R. M. Stevenson, I. Farrer, D. A. Ritchie, and A. J. Shields	
Influence of tip structure on tip-sample interaction forces at the KBr(001) surface: Results from <i>ab initio</i> investigations (8 pages)	195402
Christine Wieferink, Peter Krüger, and Johannes Pollmann	
Electric-field manipulation of the Landé g tensor of a hole in an $\text{In}_{0.5}\text{Ga}_{0.5}\text{As}/\text{GaAs}$ self-assembled quantum dot (5 pages)	195403
Joseph Pingenot, Craig E. Pryor, and Michael E. Flatté	
Transport properties of graphene across strain-induced nonuniform velocity profiles (11 pages)	195404
F. M. D. Pellegrino, G. G. N. Angilella, and R. Pucci	
Relating localized nanoparticle resonances to an associated antenna problem (5 pages)	195405
Shakeeb Bin Hasan, Robert Filter, Aftab Ahmed, Ralf Vogelgesang, Reuven Gordon, Carsten Rockstuhl, and Falk Lederer	
Spin Berry phase in anisotropic topological insulators (8 pages)	195406
Ken-Ichiro Imura, Yositate Takane, and Akihiro Tanaka	
Linear response correlation functions in strained graphene (6 pages)	195407
F. M. D. Pellegrino, G. G. N. Angilella, and R. Pucci	
Valley separation in graphene by polarized light (5 pages)	195408
L. E. Golub, S. A. Tarasenko, M. V. Entin, and L. I. Magarill	
Monte Carlo simulation of temperature-dependent elastic properties of graphene (4 pages)	195409
Shuo Chen and D. C. Chrzan	
Topological classification of adiabatic processes (4 pages)	195410
Dganit Meidan, Tobias Micklitz, and Piet W. Brouwer	
 Photophysics of pentacene thin films: The role of exciton fission and heating effects (8 pages)	195411
Akshay Rao, Mark W. B. Wilson, Sebastian Albert-Seifried, Riccardo Di Pietro, and Richard H. Friend	
Rotational transitions in a C_{60} monolayer on the $\text{WO}_2/\text{W}(110)$ surface (8 pages)	195412
Sergey I. Bozhko, Sergey A. Krasnikov, Olaf Lübben, Barry E. Murphy, Kevin Radican, Valery N. Semenov, Han Chun Wu, Brendan Bulfin, and Igor V. Shvets	
Band gap in graphene induced by vacuum fluctuations (6 pages)	195413
O. V. Kibis, O. Kyriienko, and I. A. Shelykh	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

Band alignment at the SiO ₂ /HfO ₂ interface: Group IIIA versus group IIIB metal dopants (8 pages)	195309
Xuhui Luo, Gennadi Bersuker, and Alexander A. Demkov	
Quantum impurity coupled to Majorana edge fermions (12 pages)	195310
Rok Žitko and Pascal Simon	
Long-time dynamics and stationary nonequilibrium of an optically driven strongly confined quantum dot coupled to phonons (8 pages)	195311
M. Glässl, A. Vagov, S. Lüker, D. E. Reiter, M. D. Croitoru, P. Machnikowski, V. M. Axt, and T. Kuhn	
Positronium formation via excitonlike states on Si and Ge surfaces (12 pages)	195312
D. B. Cassidy, T. H. Hisakado, H. W. K. Tom, and A. P. Mills Jr.	
Luminescence spectra of quantum dots in microcavities. III. Multiple quantum dots (14 pages)	195313
F. P. Laussy, A. Laucht, E. del Valle, J. J. Finley, and J. M. Villas-Bôas	
Strong spin-orbit interaction and helical hole states in Ge/Si nanowires (8 pages)	195314
Christoph Kloeffel, Mircea Trif, and Daniel Loss	
Phonon effects on the radiative recombination of excitons in double quantum dots (9 pages)	195315
Paweł Karwat, Anna Sitek, and Paweł Machnikowski	
Magnetic anisotropy of thin Co and Ni films on diamond surfaces (9 pages)	195316
Bernd Stärk, Peter Krüger, and Johannes Pollmann	
Quasi-Fermi-level splitting in ideal silicon nanocrystal superlattices (6 pages)	195317
P. Löper, R. Müller, D. Hiller, T. Barthel, E. Malguth, S. Janz, J. C. Goldschmidt, M. Hermle, and M. Zacharias	
Coulomb blockade conductance-peak distribution of quantum dots under generic conditions: A system-dependent random-matrix approach (10 pages)	195318
Dayasindhu Dey and Pragya Shukla	
Characterization and atomic modeling of an asymmetric grain boundary (7 pages)	195319
Hak-Sung Lee, Teruyasu Mizoguchi, Takahisa Yamamoto, Suk-Joong L. Kang, and Yuichi Ikuhara	
Nonlinear transport in a two-dimensional electron gas with a periodically modulated potential (7 pages)	195320
S. K. Lyo and W. Pan	
Scattered surface charge density: A tool for surface characterization (6 pages)	195321
Borislav Naydenov, Mauro Mantega, Ivan Rungger, Stefano Sanvito, and John J. Boland	
Imaging the lateral shift of a quantum point contact using scanning gate microscopy (5 pages)	195322
S. Schnez, C. Rössler, T. Ihn, K. Ensslin, C. Reichl, and W. Wegscheider	
Functionalization of hydrogenated (111) silicon surface with hydrophobic polymer chains (10 pages)	195323
F. Gala and G. Zollo	
Orbital pathways for Mn ²⁺ -carrier <i>sp-d</i> exchange in diluted magnetic semiconductor quantum dots (13 pages)	195324
Rémi Beaulac, Yong Feng, Joseph W. May, Ekaterina Badaeva, Daniel R. Gamelin, and Xiaosong Li	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

Dielectric function and magneto-optical Voigt constant of Cu_2O : A combined spectroscopic ellipsometry and polar magneto-optical Kerr spectroscopy study (7 pages)	195203
Francisc Haidu, Michael Fronk, Ovidiu D. Gordan, Camelia Scarlat, Georgeta Salvan, and Dietrich R. T. Zahn	
Avoiding power broadening in optically detected magnetic resonance of single NV defects for enhanced dc magnetic field sensitivity (8 pages)	195204
A. Dréau, M. Lesik, L. Rondin, P. Spinicelli, O. Arcizet, J.-F. Roch, and V. Jacques	
Microscopic structure of a VH_4 center trapped by C in Si (7 pages)	195205
Chao Peng, Haoxiang Zhang, Michael Stavola, W. Beall Fowler, Benjamin Esham, Stefan K. Estreicher, Andris Docaj, Lode Carnel, and Mike Seacrist	
Onset of nondiffusive phonon transport in transient thermal grating decay (8 pages)	195206
A. A. Maznev, Jeremy A. Johnson, and Keith A. Nelson	
First- and second-order piezoelectricity in III-V semiconductors (15 pages)	195207
Annie Beya-Wakata, Pierre-Yves Prodhomme, and Gabriel Bester	
Identification of defect properties by positron annihilation in Te-doped GaAs after Cu in-diffusion (10 pages)	195208
M. Elsayed, R. Krause-Rehberg, W. Anwand, M. Butterling, and B. Korff	
Modeling space-charge-limited currents in organic semiconductors: Extracting trap density and mobility (9 pages)	195209
Javier Dacuña and Alberto Salleo	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Effect of Coulomb interaction on exciton-polariton condensates in GaAs pillar microcavities (7 pages)	195301
A. S. Brichkin, S. I. Novikov, A. V. Larionov, V. D. Kulakovskii, M. M. Glazov, C. Schneider, S. Höfling, M. Kamp, and A. Forchel	
Single $\text{InAs}_{1-x}\text{P}_x/\text{InP}$ quantum dots as telecommunications-band photon sources (9 pages)	195302
D. Elvira, R. Hostein, B. Fain, L. Monniello, A. Michon, G. Beaudoin, R. Braive, I. Robert-Philip, I. Abram, I. Sagnes, and A. Beveratos	
Stability of the $q/3$ fractional quantum Hall states (9 pages)	195303
Yang Liu, J. Shabani, and M. Shayegan	
Effect of photogenerated carriers on the spectral diffusion of a quantum dot coupled to a photonic crystal cavity (6 pages)	195304
Arka Majumdar, Erik D. Kim, and Jelena Vučković	
Measurement of the g -factor tensor in a quantum dot and disentanglement of exciton spins (7 pages)	195305
B. J. Witek, R. W. Heeres, U. Perinetti, E. P. A. M. Bakkers, L. P. Kouwenhoven, and V. Zwiller	
Surface atomic and electronic structure of Mn_5Ge_3 on Ge(111) (6 pages)	195306
J. Hirvonen Grytzeli, H. M. Zhang, and L. S. O. Johansson	
Time-bin entanglement of quasiparticles in semiconductor devices (6 pages)	195307
Luca Chirolli, Vittorio Giovannetti, Rosario Fazio, and Valerio Scarani	
Bistability phenomena in one-dimensional polariton wires (6 pages)	195308
E. B. Magnusson, I. G. Savenko, and I. A. Shelykh	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

Competition between instabilities of Peierls transition and Mott transition in W-doped VO ₂ thin films (5 pages) . . .	195132
Enju Sakai, Kohei Yoshimatsu, Keisuke Shibuya, Hiroshi Kumigashira, Eiji Ikenaga, Masashi Kawasaki, Yoshinori Tokura, and Masaharu Oshima	
Charge carrier identification in tunneling spectroscopy of core-shell nanocrystals (8 pages)	195133
T. H. Nguyen, J. Habinshuti, Y. Justo, R. Gomes, G. Mahieu, S. Godey, J. P. Nys, S. Carrillo, Z. Hens, O. Robbe, S. Turrell, and B. Grandidier	
Phase diagram of the correlated quarter-filled-band organic salt series (<i>o</i> -DMTTF) ₂ X (X = Cl, Br, I) (17 pages)	195134
P. Foury-Leykian, P. Auban-Senzier, C. Coulon, O. Jeannin, M. Fourmigué, C. Pasquier, and J.-P. Pouget	
High-resolution x-ray absorption spectroscopy of BaTiO ₃ : Experiment and first-principles calculations (8 pages)	195135
A. Chassé, St. Borek, K.-M. Schindler, M. Trautmann, M. Huth, F. Steudel, L. Makhova, J. Gräfe, and R. Denecke	
Quantum phase transition of the sub-Ohmic rotor model (6 pages)	195136
Manal Al-Ali and Thomas Vojta	
Low-temperature thermoelectric, galvanomagnetic, and thermodynamic properties of the type-I clathrate Ba ₈ Au _x Si _{46-x} (14 pages)	195137
U. Aydemir, C. Candolfi, A. Ormeci, Y. Oztan, M. Baitinger, N. Oeschler, F. Steglich, and Yu. Grin	
Effective field theories and spin-wave excitations in helical magnets (13 pages)	195138
Alexander I. Milstein	
Topological phases and delocalization of quantum walks in random environments (6 pages)	195139
Hideaki Obuse and Norio Kawakami	
Pressure effect on the electronic structure of La _{5/3} Sr _{1/3} NiO ₄ by XES and RIXS (5 pages)	195140
L. Simonelli, V. M. Giordano, N. L. Saini, and G. Monaco	
Finite-temperature spectra and quasiparticle interference in Kondo lattices: From light electrons to coherent heavy quasiparticles (14 pages)	195141
Adel Benlagra, Thomas Pruschke, and Matthias Vojta	
Extraordinary light focusing and Fourier transform properties of gradient-index metalenses (5 pages)	195142
Changbao Ma, Marco A. Escobar, and Zhaowei Liu	
Electronic structure of copper phthalocyanine from <i>G</i> ₀ <i>W</i> ₀ calculations (8 pages)	195143
Noa Marom, Xinguo Ren, Jonathan E. Moussa, James R. Chelikowsky, and Leeor Kronik	
Variational study of the magnetically induced metal-insulator transition in FeSi _{1-x} Ge _x (7 pages)	195144
J. Imriška and R. Hlubina	
Symmetry-protected topological orders of one-dimensional spin systems with <i>D</i> ₂ + <i>T</i> symmetry (11 pages)	195145
Zheng-Xin Liu, Xie Chen, and Xiao-Gang Wen	
Semiconductors I: bulk	
Compensation-doped silicon for photovoltaic applications (6 pages)	195201
Georgy Samsonidze, Marvin L. Cohen, and Steven G. Louie	
Intermolecular bridges and carrier traps in defective C ₆₀ crystals (6 pages)	195202
L. Tsetseris and S. T. Pantelides	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 19

NOVEMBER 2011-15(I)

Kondo resonance lineshape of magnetic adatoms on decoupling layers (5 pages)	195116
Rok Žitko	
Electronic heat transport across a molecular wire: Power spectrum of heat fluctuations (6 pages)	195117
Fei Zhan, Sergey Denisov, and Peter Hänggi	
Helical fluctuations in the Raman response of the topological insulator Bi ₂ Se ₃ (5 pages)	195118
V. Gnezdilov, Yu. G. Pashkevich, H. Berger, E. Pomjakushina, K. Conder, and P. Lemmens	
Three-dimensional coupled-wave model for square-lattice photonic crystal lasers with transverse electric polarization: A general approach (11 pages)	195119
Yong Liang, Chao Peng, Kyosuke Sakai, Seita Iwahashi, and Susumu Noda	
Entanglement entropy of gapped phases and topological order in three dimensions (13 pages)	195120
Tarun Grover, Ari M. Turner, and Ashvin Vishwanath	
Electronic structure of YbCu ₂ Ge ₂ studied by soft x-ray angle-resolved photoemission spectroscopy (6 pages)	195121
A. Yasui, S.-I. Fujimori, I. Kawasaki, T. Okane, Y. Takeda, Y. Saitoh, H. Yamagami, A. Sekiyama, R. Settai, T. D. Matsuda, Y. Haga, and Y. Ōnuki	
Real-space multiband envelope-function approach without spurious solutions (9 pages)	195122
T. Eissfeller and P. Vogl	
Long- to short-range magnetic order in fluorine-doped CeFeAsO (8 pages)	195123
T. Shiroka, G. Lamura, S. Sanna, G. Prando, R. De Renzi, M. Tropeano, M. R. Cimberle, A. Martinelli, C. Bernini, A. Palenzona, R. Fittipaldi, A. Vecchione, P. Carretta, A. S. Siri, C. Ferdeghini, and M. Putti	
Effective field theory of fractional quantized Hall nematics (9 pages)	195124
Michael Mulligan, Chetan Nayak, and Shamit Kachru	
Angle-resolved photoemission spectral function in lightly doped and antiferromagnetically ordered YBa ₂ Cu ₃ O _{6+y} (12 pages)	195125
Wei Chen, Oleg P. Sushkov, and Takami Tohyama	
Gapless surface states in a lattice of coupled cavities: A photonic analog of topological crystalline insulators (5 pages)	195126
Vassilios Yannopapas	
Variational pseudo-self-interaction-corrected density functional approach to the <i>ab initio</i> description of correlated solids and molecules (22 pages)	195127
A. Filippetti, C. D. Pemmaraju, S. Sanvito, P. Delugas, D. Puggioni, and Vincenzo Fiorentini	
Phase transition in the Rényi-Shannon entropy of Luttinger liquids (4 pages)	195128
Jean-Marie Stéphan, Grégoire Misguich, and Vincent Pasquier	
Exactly solvable topological chiral spin liquid with random exchange (6 pages)	195129
Victor Chua and Gregory A. Fiete	
Mott transition in three-orbital Hubbard model with orbital splitting (9 pages)	195130
Tomoko Kita, Takuma Ohashi, and Norio Kawakami	
Strong-coupling expansion for bosons on the kagome lattice (5 pages)	195131
Vipin Kerala Varma and Hartmut Monien	

(Continued)

Kondo effect in the presence of Rashba spin-orbit interaction (<i>4 pages</i>)	193411
Rok Žitko and Janez Bonča	

ARTICLES

Electronic structure and strongly correlated systems

Comparison of stripe modulations in $\text{La}_{1.875}\text{Ba}_{0.125}\text{CuO}_4$ and $\text{La}_{1.48}\text{Nd}_{0.4}\text{Sr}_{0.12}\text{CuO}_4$ (<i>6 pages</i>)	195101
S. B. Wilkins, M. P. M. Dean, Jörg Fink, Markus Hücker, J. Geck, V. Soltwisch, E. Schierle, E. Weschke, G. Gu, S. Uchida, N. Ichikawa, J. M. Tranquada, and J. P. Hill	
Phase transitions and spectral properties of the ionic Hubbard model in one dimension (<i>8 pages</i>)	195102
Ara Go and Gun Sang Jeon	
 Trace index and spectral flow in the entanglement spectrum of topological insulators (<i>19 pages</i>)	195103
A. Alexandradinata, Taylor L. Hughes, and B. Andrei Bernevig	
Influence of exchange and correlation on structural and electronic properties of AlN, GaN, and InN polytypes (<i>13 pages</i>)	195105
Luiz Cláudio de Carvalho, André Schleife, and Friedhelm Bechstedt	
Attosecond spectroscopy of solids: Streaking phase shift due to lattice scattering (<i>5 pages</i>)	195106
E. E. Krasovskii	
Topological phase in a one-dimensional interacting fermion system (<i>6 pages</i>)	195107
Huaiming Guo and Shun-Qing Shen	
Tomonaga-Luttinger-liquid criticality: Numerical entanglement entropy approach (<i>5 pages</i>)	195108
Satoshi Nishimoto	
Ultrafast optical excitation of coherent phonons in a one-dimensional metal at the photoinduced insulator-metal transition (<i>5 pages</i>)	195109
J. D. Lee, Pilkyung Moon, and Muneaki Hase	
Quantum level engineering for Aharonov-Bohm caging in the presence of electron-electron interactions (<i>7 pages</i>)	195110
J. L. Movilla and J. Planelles	
 Electronic correlation and transport properties of nuclear fuel materials (<i>7 pages</i>)	195111
Quan Yin, Andrey Kutepov, Kristjan Haule, Gabriel Kotliar, Sergey Y. Savrasov, and Warren E. Pickett	
Electronic structure of tris(8-hydroxyquinolino)aluminium(III) revisited using the Heyd-Scuseria-Ernzerhof hybrid functional: Theory and experiments (<i>5 pages</i>)	195112
F. Bisti, A. Stroppa, M. Donarelli, S. Picozzi, and L. Ottaviano	
Incomplete current fluctuation theorems for a four-terminal model (<i>6 pages</i>)	195113
Thilo Krause, Gernot Schaller, and Tobias Brandes	
<i>GW</i> approximations and vertex corrections on the Keldysh time-loop contour: Application for model systems at equilibrium (<i>13 pages</i>)	195114
H. Ness, L. K. Dash, M. Stankovski, and R. W. Godby	
Finite-size effects on the statistical angle of an electron induced dyon in proximity to a topological insulator (<i>7 pages</i>)	195115
Sichun Sun and Andreas Karch	

(Continued)

Semiconductors II: surfaces, interfaces, microstructures, and related topics

Implications of cross-species interactions on the temperature dependence of Kapitza conductance (<i>4 pages</i>)	193301
John C. Duda, Timothy S. English, Edward S. Piekos, William A. Soffa, Leonid V. Zhigilei, and Patrick E. Hopkins	
Many-body enhanced nonlinear conductance resonance in quantum channels (<i>6 pages</i>)	193302
Jong E. Han, Saskia F. Fischer, Sven S. Buchholz, Ulrich Kunze, Dirk Reuter, Andreas D. Wieck, and Jonathan P. Bird	
Supercooling of nanoscale Ga drops with controlled impurity levels (<i>5 pages</i>)	193303
Eli A. Sutter, Peter W. Sutter, Emanuele Uccelli, and Anna Fontcuberta i Morral	
Quasiparticle band offsets of semiconductor heterojunctions from a generalized marker method (<i>4 pages</i>)	193304
Chandrima Mitra, Björn Lange, Christoph Freysoldt, and Jörg Neugebauer	

Surface physics, nanoscale physics, low-dimensional systems

Graphene conductivity near the charge neutral point (<i>5 pages</i>)	193401
L. Moriconi and D. Niemyer	
Au ₄₀ : A large tetrahedral magic cluster (<i>4 pages</i>)	193402
De-en Jiang and Michael Walter	
Vibrationally induced flip motion of a hydroxyl dimer on Cu(110) (<i>5 pages</i>)	193403
Yasuhiro Ootsuka, Thomas Frederiksen, Hiromu Ueba, and Magnus Paulsson	
Electronic transport through single noble gas atoms (<i>4 pages</i>)	193404
L. A. Zotti, M. Bürkle, Y. J. Dappe, F. Pauly, and J. C. Cuevas	
<i>Ab initio</i> study of height contrast in scanning tunneling microscopy of Ge/Si surface layers grown on Si(111) in presence of Bi (<i>4 pages</i>)	193405
Ruslan Zhachuk and José Coutinho	
Manipulating the Rashba-type spin splitting and spin texture of Pb quantum well states (<i>6 pages</i>)	193406
Bartosz Slomski, Gabriel Landolt, Fabian Meier, Luc Patthey, Gustav Bihlmayer, Jürg Osterwalder, and J. Hugo Dil	
Orbital-selective conductance of Co adatom on the Pt(111) surface (<i>5 pages</i>)	193407
V. V. Mazurenko, S. N. Isakov, M. V. Valentyuk, A. N. Rudenko, and A. I. Lichtenstein	
Evaluation of a density functional with account of van der Waals forces using experimental data of H ₂ physisorption on Cu(111) (<i>4 pages</i>)	193408
Kyuhoo Lee, André K. Kelkkanen, Kristian Berland, Stig Andersson, David C. Langreth, Elsebeth Schröder, Bengt I. Lundqvist, and Per Hyldgaard	
Role of the van der Waals forces in the ability of a double-walled carbon nanotube to accommodate a C ₆₀ molecule: The example of C ₆₀ @(15,0)@(24,0) (<i>4 pages</i>)	193409
Yannick J. Dappe and Roberto Scipioni	
Material swelling as the first step in the ablation of metals by ultrashort laser pulses (<i>4 pages</i>)	193410
Juha-Matti Savolainen, Martin S. Christensen, and Peter Balling	

(Continued)

BRIEF REPORTS

Electronic structure and strongly correlated systems

Kondo resonance in PrTi ₂ Al ₂₀ : Photoemission spectroscopy and single-impurity Anderson model calculations (<i>4 pages</i>)	193101
M. Matsunami, M. Taguchi, A. Chainani, R. Eguchi, M. Oura, A. Sakai, S. Nakatsuji, and S. Shin	
Sign structures for short-range RVB states on small kagome clusters (<i>4 pages</i>)	193102
Tiamhock Tay (郑添福) and Oleksi I. Motrunich	
Mott transition in quasi-one-dimensional systems (<i>5 pages</i>)	193103
S. Moukouri and Eitan Eidelstein	
Optical properties of two-dimensional quasicrystalline plasmonic arrays (<i>4 pages</i>)	193104
Christina Bauer, Georg Kobiela, and Harald Giessen	
Dynamic reflectionless defects in tight-binding lattices (<i>4 pages</i>)	193105
Stefano Longhi and Giuseppe Della Valle	
Topological insulators on a Mobius strip (<i>4 pages</i>)	193106
Lang-Tao Huang and Dung-Hai Lee	

Semiconductors I: bulk

Temperature dependence of the Raman spectrum in Ge _{1-y} Sn _y and Ge _{1-x-y} Si _x Sn _y alloys (<i>4 pages</i>)	193201
Sampriti Bagchi, Christian D. Poweleit, Richard T. Beeler, John Kouvetakis, and José Menéndez	
Electrical detection of electron-spin-echo envelope modulations in thin-film silicon solar cells (<i>5 pages</i>)	193202
M. Fehr, J. Behrends, S. Haas, B. Rech, K. Lips, and A. Schnegg	
Triplet exciton dynamics in rubrene single crystals (<i>4 pages</i>)	193203
Aleksandr Rysanyanskiy and Ivan Biaggio	
Spin tunneling in the diamond color center coupled to the P1 center (<i>6 pages</i>)	193204
M. Hebbache	
Anisotropic effective mass of orthoexcitons in Cu ₂ O (<i>4 pages</i>)	193205
Dietmar Fröhlich, Jan Brandt, Christian Sandfort, Manfred Bayer, and Heinrich Stolz	

